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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,064

05/11/2006

Jan Tuma

51180

8933

1609

7590

03/14/2011

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

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SUITE 600

WASHINGTON,, DC 20036

EXAMINER

FEATHERLY, HANA SANEI

ART UNIT

PAPER NUMBER

2889

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,064	<b>Applicant(s)</b> TUMA, JAN	
	<b>Examiner</b> Hana S. Featherly	<b>Art Unit</b> 2889	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment(s)***

The Amendment, filed on 1/4/2011, has been entered and acknowledged by the Examiner.

Cancellation of claim(s) 1-16 has been entered.

Claim(s) 17-30 are pending in the instant application.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

Claim(s) 20 are objected to because of the following informalities: The phrase “*without* molding tool” does not recite a positive limitation and instead attempts to claim the disclosed invention by *excluding* what the applicants did not disclose or invent, rather than distinctly and particularly pointing out what the applicants did disclose or invent. Essentially this claim language fails to provide any *structural* element or concrete component and there is improper [MPEP 2173.05(i)].

Appropriate correction is required.

### ***Claim Rejection(s) - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 17-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuma (DE 103 01 424 B3) in view of Harasawa et al., (U.S. Pub. No. 2002/0144442 A1) as previously cited.

Regarding Claim 17, Tuma teaches device (5, "circuit" → 7, "an electronic component in form of an integrated semiconductor device 7," ¶ [0025]; see at least Fig. 1) comprising a first fiat substrate (3, "laminar carrier 3 from a thermoplastic mouldable plastic") having first and second opposite surfaces, adhesion closure elements (2 "detention catch elements," [0027]) being unitary and one piece with said first flat substrate and extending at least in areas from the first surface (4) for detachably securing the device (5) to a carrier (9-11, "clothing part," [0027]) by interaction of adhesion closure elements (10) of the first fiat substrate (3) with the carrier (9-11). Tuma fails to teach the device specifically being a display device.

In the same field of endeavor of **electronic components types**, Harasawa teaches device that is a display device displaying static and motion pictures, alphanumeric characters or the like, the pixels being triggerable by means of trigger electronics individually or in groups ([0034]) in order to advantageously expand the purpose/use and functionality of the device of Tuma by adding 'display' images. It should additionally be noted that Tuma teaches a variation of the type of respective application use ([0007]-[0010]), therefore it would have been further obvious to one of ordinary skill in the art, at the time of the invention to employ 'display device' as the 'electronic components' of Tuma.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify or add the display device, as disclosed by Harasawa, in the device of Tuma in order to advantageously expand the purpose/use and functionality of the device of Tuma by adding 'display' images.

Regarding Claim 18, Tuma the adhesion closure elements (2) of the first fiat substrate (3) interact mechanically with the corresponding adhesion closure elements (10) of the carrier (9-11).

Regarding Claim 19, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 17 above) and further teaches adhesion closure elements (2) of the first fiat substrate (3) interact with a surface of the carrier means (9-11). Tuma-Harasawa fails the teach adhesion closure elements of the first fiat substrate interact with a surface of the carrier means by chemical bonding forces, especially by van der Waals forces.

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to provide that the adhesion closure elements of the first fiat substrate interact with a surface of the carrier means by chemical bonding forces, especially by van der Waals forces since such electrostatic interactions yield a highly adhesive and bonded interface, thereby improving mechanical stability. Furthermore, the surfaces of the adhesion closure elements intrinsically include infinitesimally weak forces caused by surface tension or van der Waals forces.

Regarding Claim 20, Tuma teaches the adhesion closure elements (3). The applicant is claiming the product of adhesion closure elements including a method (i.e. a

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process) of making without molding tools, consequently, Claim 5 is considered a “product-by-process” claim. In spite of the fact that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Regarding Claim 21, Tuma teaches that the first fiat substrate (3) consists of a plastic, especially of a thermoplastic (3 → “thermoplastic,” [0025]).

Regarding Claim 22, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 17 above). Tuma-Harasawa fails to teach the first fiat substrate consisting of a duroplastic

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the composition of the first flat substrate to duroplastic, since such a modification would advantageously render the substrate flexible and thereby better able to absorb residual mechanical vibrations.

Regarding Claim 23, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 17 above). Tuma-Harasawa fails to teach the first fiat substrate is elastic.

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the composition of the first flat substrate to an elastic first flab substrate, since such a modification would advantageously render the substrate flexible and thereby better able to absorb residual mechanical vibrations.

Regarding Claim 24, Tuma-Harasawa teaches that the triggerable pixels (2; 102) ([0034] of Harasawa) are located directly on the second surface of the the first fiat substrate (3 of Tuma, as part of electronic components 5 → 6).

Motivation to combine would be the same as stated in the rejection of Claim 17.

Regarding Claim 25, Tuma-Harasawa teaches the pixels ([0034] of Harasawa) are formed by liquid crystals, electronic ink or electroluminescent components.

Motivation to combine would be the same as stated in the rejection of Claim 17.

Regarding Claim 26, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 17 above). Tuma-Harasawa fail to teach the triggerable pixels being polymer light emitting diodes.

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the triggerable pixels to be polymer light emitting diodes, since such a modification would advantageously render optimum light emission while maintaining structural integrity.

Regarding Claim 27, Tuma-Harasawa teaches the invention set forth above (see rejection in Claim 17 above). Tuma-Harasawa fail to teach the said triggerable pixels being directly on a second flat substrate laminated on said second surface of the first flat substrate.

However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the configuration of the triggerable pixels to be rendered directly on a second flat substrate laminated on said second surface of the first flat substrate, since such a modification would advantageously contribute to reducing the size and bulkiness of the device overall by incorporating the pixels within the pre-existing space provided between the first and second substrates.

Regarding Claim 28, Tuma-Harasawa teaches that the display device ([0034] of Harasawa) furthermore has a flat illuminant which emits light as a result of supplying energy, especially electrical energy. Since the electronic component of Tuma is flat, then the addition of the display device of Harasawa will also be rendered flat.

Motivation to combine would be the same as stated in the rejection of Claim 1.

Regarding Claim 29, Tuma-Harasawa teaches a flat illuminant is of thin-film or thick-film thechnology ([0009] of Tuma) applied to the first flat substrate (motivation to combine would be the same as stated in the rejection of Claim 14).

Regarding Claim 30, Tuma-Harasawa teaches that the fiat illuminant ([0034] of Harasawa) is located between the first fiat substrate (3 of Tuma) and the pixels (as modified by addition of display device of Harasawa).

Motivation to combine would be the same as stated in the rejection of Claim 17.



***Other Prior Art Cited***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Pub. No. 2006/0131066,

U.S. Pat. No. 5774341,

U.S. Pat. No. 5457610,

U.S. Pat. No. 6598274,

U.S. Pat. No. 6173899,

U.S. Pat. No. 5136470,

U.S. Pat. No. 4429348,

U.S. Pub. No. 20020113925 teaches van der waals forces.

U.S. Pub. No. 2002/0099157 teaches polymer light emitting diodes.

***Response to Arguments***

Applicant's argument(s) filed on 1/4/2011 have been fully considered but they are not persuasive.

A. In response to Applicant's arguments that Tuma (DE 103 01 424 B3) in view of Harasawa et al., (U.S. Pub. No. 2002/0144442 A1) does not disclose the claimed invention, the Examiner respectfully disagrees.

Regarding applicant's argument that Harasawa does not render obvious combining the display device with the adhesion closure elements of Tuma, Examiner points out that the introduction of Harasawa was merely for the added benefit of expanding the purpose or use and functionality of the electronic device of Tuma by

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rendering it a display device. This combination of Tuma and Harasawa is further obvious by the explicit teaching of Tuma disclosing a **variation** of the **type** of respective application use ([0007]-[0010]), therefore it would have been further obvious to one of ordinary skill in the art, at the time of the invention to employ 'display device' as the 'electronic components' of Tuma.

For the reasons stated above, the rejection of the claims is deemed proper.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hana S. Featherly whose telephone number is (571)-272-8654. The examiner can normally be reached on Monday- Friday, 9 am - 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571) 272-2303. The fax phone number

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for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Hana Featherly/*

**Hana Sanei Featherly**  
**Art Unit 2889 Patent Examiner**

/Toan Ton/

Supervisory Patent Examiner, Art Unit 2889